

Jan Vybiral

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5028095/publications.pdf>

Version: 2024-02-01

48
papers

1,464
citations

566801

15
h-index

329751

37
g-index

49
all docs

49
docs citations

49
times ranked

1682
citing authors

#	ARTICLE	IF	CITATIONS
1	Lower bounds for integration and recovery in L2. Journal of Complexity, 2022, , 101662.	0.7	4
2	Robust and resource efficient identification of shallow neural networks by fewest samples. Information and Inference, 2021, 10, 625-695.	0.9	4
3	Gelfand numbers of embeddings of Schatten classes. Mathematische Annalen, 2021, 380, 1563-1593.	0.7	4
4	Lower bounds for the error of quadrature formulas for Hilbert spaces. Journal of Complexity, 2021, 65, 101544.	0.7	8
5	Entropy numbers of finite-dimensional embeddings. , 2020, 38, 319-336.		2
6	On the volume of unit balls of finite-dimensional Lorentz spaces. Journal of Approximation Theory, 2020, 255, 105407.	0.5	0
7	A variant of Schur's product theorem and its applications. Advances in Mathematics, 2020, 368, 107140.	0.5	12
8	Learning General Sparse Additive Models from Point Queries in High Dimensions. Constructive Approximation, 2019, 50, 403-455.	1.8	1
9	The minimal k -dispersion of point sets in high dimensions. Journal of Complexity, 2019, 51, 68-78.	0.7	4
10	An upper bound on the minimal dispersion. Journal of Complexity, 2018, 45, 120-126.	0.7	22
11	Franke's Jawerth embeddings for Besov and Triebel-Lizorkin spaces with variable exponents. Annales Academiae Scientiarum Fennicae Mathematica, 2018, 43, 187-209.	0.7	3
12	Learning physical descriptors for materials science by compressed sensing. New Journal of Physics, 2017, 19, 023017.	1.2	100
13	Non-asymptotic Analysis of ℓ_1 -norm Support Vector Machines. IEEE Transactions on Information Theory, 2017, , 1-1.	1.5	1
14	Sparse Proteomics Analysis – a compressed sensing-based approach for feature selection and classification of high-dimensional proteomics mass spectrometry data. BMC Bioinformatics, 2017, 18, 160.	1.2	21
15	Entropy numbers of embeddings of Schatten classes. Journal of Functional Analysis, 2017, 273, 3241-3261.	0.7	14
16	Volumes of unit balls of mixed sequence spaces. Mathematische Nachrichten, 2017, 290, 1317-1327.	0.4	1
17	Carl's inequality for quasi-Banach spaces. Journal of Functional Analysis, 2016, 271, 2293-2307.	0.7	8
18	On some aspects of approximation of ridge functions. Journal of Approximation Theory, 2015, 194, 35-61.	0.5	4

#	ARTICLE	IF	CITATIONS
19	Entropy and Sampling Numbers of Classes of Ridge Functions. <i>Constructive Approximation</i> , 2015, 42, 231-264.	1.8	25
20	Big Data of Materials Science: Critical Role of the Descriptor. <i>Physical Review Letters</i> , 2015, 114, 105503.	2.9	658
21	A Survey of Compressed Sensing. <i>Applied and Numerical Harmonic Analysis</i> , 2015, , 1-39.	0.1	20
22	Complex interpolation of weighted Besov and Lizorkin-Triebel spaces. <i>Acta Mathematica Sinica, English Series</i> , 2014, 30, 1297-1323.	0.2	15
23	Lorentz spaces with variable exponents. <i>Mathematische Nachrichten</i> , 2014, 287, 938-954.	0.4	50
24	Weak and quasi-polynomial tractability of approximation of infinitely differentiable functions. <i>Journal of Complexity</i> , 2014, 30, 48-55.	0.7	14
25	Non-smooth atomic decompositions, traces on Lipschitz domains, and pointwise multipliers in function spaces. <i>Journal of Functional Analysis</i> , 2013, 264, 1197-1237.	0.7	9
26	A note on the spaces of variable integrability and summability of Almeida and Hästö. <i>Proceedings of the American Mathematical Society</i> , 2013, 141, 3207-3212.	0.4	29
27	ON THE INTERPLAY OF REGULARITY AND DECAY IN CASE OF RADIAL FUNCTIONS I: INHOMOGENEOUS SPACES. <i>Communications in Contemporary Mathematics</i> , 2012, 14, 1250005.	0.6	11
28	Homogeneity Property of Besov and Triebel-Lizorkin Spaces. <i>Journal of Function Spaces and Applications</i> , 2012, 2012, 1-17.	0.5	3
29	Spaces of Variable Smoothness and Integrability: Characterizations by Local Means and Ball Means of Differences. <i>Journal of Fourier Analysis and Applications</i> , 2012, 18, 852-891.	0.5	54
30	Average Best m-term Approximation. <i>Constructive Approximation</i> , 2012, 36, 83-115.	1.8	2
31	Learning Functions of Few Arbitrary Linear Parameters in High Dimensions. <i>Foundations of Computational Mathematics</i> , 2012, 12, 229-262.	1.5	58
32	Particle Systems and Kinetic Equations Modeling Interacting Agents in High Dimension. <i>Multiscale Modeling and Simulation</i> , 2011, 9, 1727-1764.	0.6	5
33	On positive definite functions and Bochner's Theorem. <i>Journal of Complexity</i> , 2011, 27, 264-272.	0.7	10
34	Johnson-Lindenstrauss lemma for circulant matrices**. <i>Random Structures and Algorithms</i> , 2011, 39, 391-398.	0.6	35
35	A variant of the Johnson-Lindenstrauss lemma for circulant matrices. <i>Journal of Functional Analysis</i> , 2011, 260, 1096-1105.	0.7	80
36	Compressed learning of high-dimensional sparse functions. , 2011, , .		4

#	ARTICLE	IF	CITATIONS
37	Weak estimates cannot be obtained by extrapolation. , 2010, 28, 375-377.		0
38	On sharp embeddings of Besov and Triebel-Lizorkin spaces in the subcritical case. Proceedings of the American Mathematical Society, 2010, 138, 141-146.	0.4	15
39	On dilation operators in Triebel-Lizorkin spaces. Functiones Et Approximatio, Commentarii Mathematici, 2009, 41.	0.1	3
40	Linear information versus function evaluations for $\langle \text{mml:math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/xml/common/struct-bib/dtd" \rangle$	0.5	24
41	Widths of embeddings in function spaces. Journal of Complexity, 2008, 24, 545-570.	0.7	44
42	On dilation operators and sampling numbers. Journal of Function Spaces and Applications, 2008, 6, 17-46.	0.5	8
43	A New Proof of the Jawerth-Franke Embedding. Revista Matematica Complutense, 2008, 21, .	0.7	13
44	Sampling numbers and function spaces. Journal of Complexity, 2007, 23, 773-792.	0.7	17
45	Traces of functions with a dominating mixed derivative in $\hat{\mathbb{A}}_{\mathbf{3}}$. Czechoslovak Mathematical Journal, 2007, 57, 1239-1273.	0.3	5
46	A remark on better $\hat{\mathbb{A}}_{\mathbf{3}}$ -inequality. Mathematical Inequalities and Applications, 2007, , 335-341.	0.1	1
47	Function spaces with dominating mixed smoothness. Dissertationes Mathematicae, 0, 436, 1-73.	1.0	32
48	Deterministic Constructions of High-Dimensional Sets with Small Dispersion. Algorithmica, 0, , 1.	1.0	0